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DISCUSSION

CHARLES L. IANNE, M. D. (Santa Clara County Hospital, San Jose).—Doctor Trimble has given us a concise and interesting history of the Preventorium Movement. He especially elaborates on the reason for its connection with Tuberculosis Sanatoria and why these institutions were manned by tuberculosis specialists.

My experience with preventorium work dates from the opening of the Del Valle Preventorium that Doctor Trimble mentions. I feel, like Doctor Trimble and Doctor Hawes, that these institutions have filled a great need in the anti-tuberculosis movement. There are some who think that instead of spending money on these institutions, more emphasis should have been put on isolating the "carrier." I wonder how cognizant the public would have been of the "carrier" and his effect on children if preventoria had not been established.

Statistics are not always interesting, but doubting Thomases must be convinced; hence our experience at Sunnyholme Preventorium in Santa Clara County may be of value: In the interval between 1923 and 1933, 428 children had been discharged from the preventorium. A survey of this group was made between 1928 and 1933 (the ages then ranging between 9 and 20). This survey showed that only six patients had developed reinfection type of tuberculosis. One died owing to failure to coöperate in the follow-up, and the other five, after a short period of sanatorium care, returned to their homes in good health. On the other hand, in the same five-year period (1928-1933) 110 patients, of the same age group, who had not had preventorium care, were admitted to the Santa Clara County Sanatorium. Both groups came from the same social strata. Many had satisfactory homes where the source had either died or been removed to the sanatorium, the only difference being that the former group received the extra physical boost afforded by the preventorium and the advantage of concentrated health education. Perhaps the educational value to the community is the greatest benefit derived from the preventorium. The parents of the preventorium children become acquainted with the preventorium routine and purposes, and through the interest of the Parent-Teacher Associations and Service Clubs the community gradually becomes "tuberculosis-prevention" conscious.

Doctor Trimble mentions that Preventoria are gradually enlarging their field to include the care of convalescents from other diseases; that they are being staffed by pediatricians and other workers trained in childhood psychology. He emphasizes the importance of the teaching value of these institutions in training doctors, nurses, public health workers, and parents.

In my talks to lay audiences I always refer to the Preventorium as the "farm center" where the community may learn better methods for the growth and development of its most important "crop"—the next generation.

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CARL R. HOWSON, M. D. (1930 Wilshire Boulevard, Los Angeles).—Doctor Trimble has set forth very clearly what, to my mind, is the best thought regarding the status of the preventorium.

Originally, the preventorium was designed for the care of the pretuberculous child. As time went on we found that the pretuberculous child was nonexistent; that children falling into such a classification did not develop tuberculosis with any greater frequency than did the average group of children.

When the increasing use of the x-ray revealed the lesions of first infections in the lungs of young children, we were appalled at the extent of the apparent pathology. Many years of observation were necessary before we could be convinced of the relatively innocuousness of these infections and the amazing manner in which the lung fields eventually cleared, leaving the familiar Ghon tubercle. A most striking demonstration of this was the work of Myers and Stewart at Lymanhurst, to which Doctor Trimble refers.

In the swing of opinion away from our former concept there is sometimes a tendency to overlook one qualification made by these investigators in regard to these primary infections: they stress the good prognosis, "if the child is removed promptly from sources of infection and subsequently protected from reinfection." If these children are of the types outlined by Doctor Trimble, the need for institutional care still exists.

In view of the frequency of the finding of tubercle bacilli in the stomach washings of children with primary parenchymal lesions, it is obvious they should be segregated, preferably in separate buildings or institutions.

Full utilization of the value of institutional care can be obtained only when the home conditions are studied carefully and corrections made when indicated. Psychological study and treatment of many of the children are needed; and perhaps even more necessary is similar treatment for one or both parents.

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CHESLEY BUSH, M. D. (Livermore).—When we see on the screen a picture of long-coated Southerners with shotguns, prohibiting passengers from New Orleans alighting from the cars because they came from a city infested with yellow fever, we laugh; and laugh because we now know that is not the way to control yellow fever.

We now know, also, that putting malnourished children into summer camps and preventoria is not the way to control tuberculosis; but the old ideas of 1920 are still predominant in many parts of our country, and the newer knowledge has not yet caught up. Money that should be expended in institutionalization and treatment of the adult source of infection is being spent in the more dramatic and inspiring care of children.

What shall we do with our "preventoria"?

In Alameda County we have an eighty-bed preventorium. In 1939 we would have difficulty in finding eighty children with positive tuberculin tests who come from tuberculous families, and who are under par. We have had difficulty in finding thirty children with active tuberculous disease to fill our sanatorium children's department for the past five years. So we have closed this department as a children's sanatorium and made it available for adult patients. We have consolidated all children's work in Del Valle—making one isolated unit for primary active tuberculosis of childhood; one ward for the convalescent care of any pediatric or surgical condition; and one ward for the type of child mentioned by Doctor Trimble.

In Alameda County today, with six hundred thousand population, we have fifteen cases of bone and joint, and primary lung tuberculosis, among young children hospitalized at Del Valle. Tuberculosis is becoming a rare disease among children of the two to twelve age group in our community.

Let us abolish any connection between the word "preventorium" and tuberculosis. A "preventorium," if we must preserve the word, is a "children's health school."

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H. G. TRIMBLE, *Closing.*—I should like to thank the discussants for their kind treatment. It is interesting that we all agree so closely on what has been a controversial subject. California has long been among the leaders in putting into effective action, on a wide scale, modern advances in the general health field, including tuberculosis.

I can only hope that the ideas expressed may soon bear fruit, encouraging institutions of the general type known as preventoria to make their programs more effective and fulfill the needs in the child health field for which they can so readily be adapted.

SCABIES*

ITS TREATMENT WITH BENZOYL BENZOATE, AS COMPARED WITH SODIUM THIOSULPHATE PLUS HYDROCHLORIC ACID

By ARNE ELY INGELS, M. D.
San Francisco

DISCUSSION *by Henry J. Templeton, M. D., Oakland; C. Russell Anderson, M. D., Los Angeles; Harry E. Alderson, M. D., San Francisco.*

"THE seven-year itch," or scabies, has deserved its name on account of the lack of response to methods in use up to the last few years. This may have been due, in part, because the regimen em-

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ployed during a cure would often neglect important factors, like contamination from other members in a family and disinfecting measures. Thus reinfections would often run a year-long cycle.

DANISH OINTMENT

Danish ointment was the merited cure for scabies since reported by E. Ehlers, in 1921.[1]

Modifications of this, containing Balsam of Peru and precipitated sulphur, have been in use since Caesar Boeck's days.

Arthur M. Greenwood and Margaret Reilly[2] report the successful treatment of 2,582 cases of scabies by the so-called Danish method at the Massachusetts General Hospital. This method was used for ten years, with particular attention to the accurate formula, preparation and regimen. No detailed case reports, however, are given.

Anyone who has used the Danish method will know the untoward reactions, like dermatitis venenata, and distressing itching conditions which may develop.

OTHER METHODS

A great advance in treatment was the employment of the combined "cure," with 40 per cent sodium thiosulphate and 4 per cent dilute HCl (by Raveant and Mahien).[3] The active principle is H_2S, which is liberated when HCl comes in contact with the sodium thiosulphate. The sodium thiosulphate was rubbed into the skin and allowed to dry, whereupon the diluted HCl was applied and also allowed to dry. The same procedure was repeated the next day when, after a bath, the patient was told not to repeat the application without permission. From last-mentioned and other reports, wherein modifications of this method were employed, it seemed justified to draw optimistic conclusions. G. V. Kulchar and W. M. Meininger treated fifty cases of scabies according to this method, showing satisfactory results.[5]

Thirty patients treated by me according to the above system, at Stanford University Hospital and in my private practice, showed persistence of the scabies lesions in four cases. Five cases showed a mild dermatitis venenata. A great number complained of aggravated or distressing itchy sensations, which betrayed the peculiar tenacity characteristic of a sulphur dermatitis. However, instructions seemed to have been followed accurately, and the druggist's product was checked in instances where there was doubt. The patients were selected from all age groups, free from secondary infections and other skin manifestations. Where such were present, the itching and smarting in the days following were severe enough to lead one to abstain from the scabies treatment until the other manifestations had been alleviated or cleared up.

A repetition of the cure, with or without the physician's consent, aggravated the symptoms considerably. Two cases were hospitalized four to six weeks for the dermatitis venenata, which had developed in this manner. Altogether, the relatively complicated regimen, and the nature of the remedies employed, made it imperative to check the unintelligent patient and the accurate filling of the prescriptions.

KISMEYER'S REPORT

In 1937, A. Kismeyer[4] reported eight thousand cases treated with benzoyl benzoate, sapo mollis, and iso-propyl alcohol, 75 per cent, each equal parts, at the "Kommune Hospital" in Copenhagen. After soaking the patient for ten minutes in a bath, the mixture was brushed into the skin for five minutes. After drying, another application was brushed in. Twenty-four hours after, a bath was taken, and underwear and bedding changed.

The active principles would be (1) benzoyl benzoate, which is a balsam of Peru distillate; (2) the keratolytic soap; and (3). isopropyl alcohol.

AUTHOR'S SERIES

This same schedule was applied in my series of ninety cases, excepting the brushing, and that plain 75 per cent alcohol was employed in half of the cases. In the first twenty cases, the solution was rubbed in with a soft brush. In the subsequent cases, the mixture was rubbed in with the flip of a washrag, or with the hands only. This last seemed easier, simpler, and served the purpose.

Only cases without secondary infection, or eczematous conditions, are included. All ages and all types of skin were represented. The ninety cases cleared up promptly without a repetition of the "cure." No case of dermatitis venenata developed. One case of severe itching, but without visible skin changes, developed in a person who had been using soap and water in excess, after the "cure," and only a few cases showed mild itching. Oiling the skin, and refraining from soap and water a few days, promptly alleviated the symptoms.

I might add that three patients who showed recurrence after the sodium thiosulphate plus hydrochloric acid "cure" cleared up promptly after the benzoyl benzoate "cure."

An additional, smaller series of scabies, with impetiginous lesions and secondary dermatitis, responded under the benzoyl benzoate cure, with healing of both scabies and the impetigo. Subacute dermatitis, from prolonged scratching, faulty application or filling of the prescription, seemed to stand the method well, whereas analogous cases treated with sodium thiosulphate plus hydrochloric acid showed accentuation of the condition in question. Thus the injured skin showed much sharper reactions subjectively and clinically. It was further observed that the safety margin, or therapeutic latitude, showed very favorably with benzoyl benzoate. For example, when the cure had been repeated once or several times, intentionally or by misunderstanding from the patient, the worst consequence was only increased itching and only a mild dermatitis venenata. In a patient who had been applying the benzoyl benzoate for one week, mild dermatitis venenata developed. With sodium thiosulphate dermatitis venenata was frequently seen in repeated cases. I might, finally, add that in all the cases the diagnostic landmarks were the appearance of the typical scabies lesion, with the burrow and their distribution, and nocturnal itching, in addition to the demonstration of the acarus scabiei when it was possible.

For both systems, the usual scabies regimen was employed, paying particular attention to scabies in the family, etc.

All the "cures" were started with thorough bathing and cleaning with soap, change of underwear, bedding, and possibly dry cleaning of clothes. Each patient received an instruction sheet and was told to report.

COMMENT

It is noteworthy that a second "cure" was unnecessary with the benzoyl benzoate method. I shall not count one case where, without my knowledge, the course was repeated three days after the finish of the first course. Even the experienced dermatologist would be unable to judge the final result after three to four days. For example, it is a known fact that the chronic scabies papule, with reactive inflammation in the skin, often takes weeks to involute, particularly on the shaft of the penis.

Discussion.—In interpreting various reports it is interesting to notice the good results with the Danish cure, reported by Greenwood and Reilly. However, accurate data are not supplied in the statistics, and no mention made of individual cases.

The sodium thiosulphate plus hydrochloric acid method is undoubtedly a great improvement over the last. Its enthusiastic reports should not be doubted. Disadvantages, amongst which the observed redness, or dermatitis venenata, of the skin and grave itching are the most obvious, justifies a search for further perfection.

The reported series of ninety cases treated with benzoyl benzoate-sapo mollis-alcohol, compared with an approximately equal number of aforementioned, justifies optimistic conclusions.

CONCLUSIONS

1. The benzoyl benzoate cure was the most effective in these two series.
2. It is simple and cheap.
3. Secondary effects, like dermatitis venenata, were absent, itching negligible.
4. Impetinginized scabies lesions, which responded strikingly with the benzoyl benzoate cure, were protracted or aggravated with sodium thiosulphate plus hydrochloric acid.
5. The safety margin of benzoyl benzoate "cure" has a great advantage over that of the sodium thiosulphate cure, particularly where "misunderstandings" have occurred.
6. In a few cases, the "one application" method with benzoyl benzoate has been promising, and is being tried out.

490 Post Street.

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DISCUSSION

HENRY J. TEMPLETON, M. D. (3115 Webster Street, Oakland).—The old orthodox treatment of scabies by means of sulphur ointment is open to several objections. As pointed out by Kingston,[1] it occasionally fails to kill the acari even after proper application. I have noted this same drawback in a number of cases. Next, it produces a fairly high incidence of sulphur dermatitis, and, lastly, it is "messy" and time-consuming.

The method described by the author would seem to materially simplify the treatment of scabies. I have used it in about a dozen cases in my private practice, and with considerable satisfaction; but many more cases must be treated and results appraised before we finally can evaluate it.

C. RUSSELL ANDERSON, M. D. (1930 Wilshire Boulevard, Los Angeles).—Any improvement in the treatment of scabies is welcome, and I am sure that every physician will appreciate the points brought out in Doctor Ingels' study.

He mentions the tenacity of sulphur dermatitis, whose duration at times varies from four to six weeks in spite of all types of soothing applications. Pyrethrum ointment has been used with success by some physicians. Although sulphur dermatitis is then avoided, many dermatologists hesitate to use it for fear of producing a pyrethrum sensitivity, which would be disastrous in view of the widespread use of pyrethrum in insecticides.

The short period of treatment with the benzyl benzoate mixture, the simplicity of application, the uniformly good results, and the relative freedom from treatment dermatitis, merit the attention of every physician who has occasion to prescribe for scabies.

HARRY E. ALDERSON, M. D. (490 Post Street, San Francisco).—I am glad that Doctor Ingels mentioned the difficulty that one experiences in obtaining complete coöperation on the part of the patient and family. Such a little oversight as that of failing to clean the toilet seats thoroughly may account of recurrences. I believe that the spread of scabies in schools is often due to contamination of toilet seats. The tendency for sulphur dermatitis to develop promptly in some patients increases our difficulties. Many patients, before consulting a dermatologist, have already tried various neighborhood and drug-store remedies containing sulphur, and, of course, promptly feel the bad effects of further sulphur medication.

The sodium thiosulphate and acid combination is quite useful, but we see too many recurrences, or, shall we say, failures to achieve a complete cure by this method.

The benzoyl benzoate treatment has proved its usefulness, but even that method is not 100 per cent effective. In some countries plain balsam of Peru has been used, having the patients anoint completely the entire body, and good results thereby are obtained; but frequently renal irritation has developed. The benzoyl benzoate, a derivative of balsam of Peru, might be expected to produce toxic effects, but so far I have not observed any. I believe the method is quite valuable, and shall continue using it in cases where good coöperation can be obtained, but I expect also to have to use sulphur in some cases.

[1] Kingston, Frank E.: An Outbreak of Scabies in a Mental Hospital, The Lancet, Vol. 11, No. 15, p. 815, (Oct. 12), 1935.

ROENTGEN DIAGNOSIS OF DISEASES OF THE ILEOCECAL REGION OF THE GASTRO-INTESTINAL TRACT*

By JOSEPH JELLEN, M.D.
Los Angeles

DISCUSSION *by Charles M. Richards, M. D., San Jose; Henry Snure, M. D., Los Angeles.*

PART II†

NONSPECIFIC ULCERATIVE GRANULOMAS (REGIONAL ILEITIS)

SINCE the description of regional ileitis in 1932 there has been an active interest in the subject of benign inflammatory granulomas. In a previous communication[3] the writer presented a detailed study of the clinical, pathological, and roentgen

* From the Department of Radiology of the Queen of Angels Hospital, Los Angeles.
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